COOPER LIGHTING - SURE-LITES®

DESCRIPTION

The NCB Series is a premium grade emergency lighting system with all metal construction that combines functional styling and power performance capability. These units contain serviceable nickel cadmium batteries and feature advanced solid-state circuitry.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Electronic
- Dual Voltage Input 120/277 VAC, 60 Hz
- Line-latching
- Solid-state Switching
- Low-Voltage Disconnect
- Brownout Circuit
- Overload/Short Circuit Protection
- Test Switch/Power
- Indicator Light

Housing Construction
- 18-Gauge Die-Formed Steel Housing
- 18-Gauge Die-Formed Steel Cover

Housing Construction Cont.
- Knockout, Conduit or Cord Set
- Key-hole Mounting Slots
- Corrosion Resistant White Enamel Finish

Battery
- Serviceable Wet Cell Nickel Cadmium
- Full Recharge Time: NCB1290: 24 hrs. (max.) NCB12180, NCB12225: 48 hrs. (max.)
- Polarized Battery Terminals

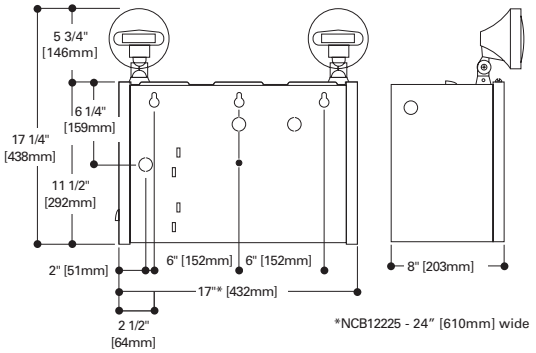
Code Compliance
- UL 924 Listed
- Life Safety NFPA 101
- NEC/OSHA
- Most State and Local Codes

Warranty
- Unit: 1-year
- Battery: 15-year pro-rata

Head/Lamp Data
- Two Heads Standard
- Glare-Free Lens
- Fully Adjustable
- Remote Capability
- High Impact - Thermoplastic
- Matches Housing Finish

NCB
SERIES

12-VOLT
SERVICEABLE WET CELL
NICKEL CADMIUM BATTERY
Emergency Lighting



ELECTRICAL RATINGS

	Rated Wattage to 87 1/2% of Rated D.C. Voltage					Lamp Information		
Model	DC Voltage	1 1/2 Hours	2 Hours	3 Hours	4 Hours	Type	Wattage	Number
NCB1290[1]	**12**	**90**	**67**	**45**	**33**	Incandescent	**9**	**29-86**
NCB12180[1]	**12**	**180**	**135**	**90**	**67**	Incandescent	**9**	**29-86**
NCB12225[1]	**12**	**225**	**168**	**112**	**84**	Incandescent	**9**	**29-86**

TOTALLY PREDICTABLE RELIABILITY.

ORDERING INFORMATION

SAMPLE NUMBER: NCB45VTDM

NCB | | |

Model Number
NCB45
NCB90
NCB110

Options (add as suffix)
MH=Metal Heads
A=Ammeter
TDM=Time Delay Monitor
V=Voltmeter

Accessories (order separately)
Cord Set
CSK120=Cord Set (120 VAC)
CSK277=Cord Set (277 VAC)
Mounting Kit
3MSWH=Mounting Shelf (not applicable for NCB12225) (White Finish)
3BRWH=Mounting Brackets (3-White Finish)
Protective Housing
WG3 =Wire Guard (not applicable for NCB12225)
VS2=Polycarbonate Vandal Shield
VS2WP=Polycarbonate Vandal Shield - Weatherproof

[1] **Alternate Lamps:** Consult Cooper Lighting Representative.

[2] Order separately. Not available for NCB12225.

* 0, 1, 3 and 4 Heads also available. Specify after catalog number (i.e. NCB12180408).

ENERGY DATA

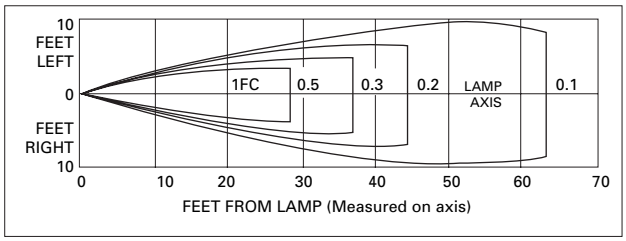
NCB1290
Input Current (Max.):
120V= .84A
277V= .37A

NCB-12180
Input Current (Max.):
120V= .72A
277V= .30A

NCB12225
Input Current (Max.):
120V= .1.28A
277V= .55A

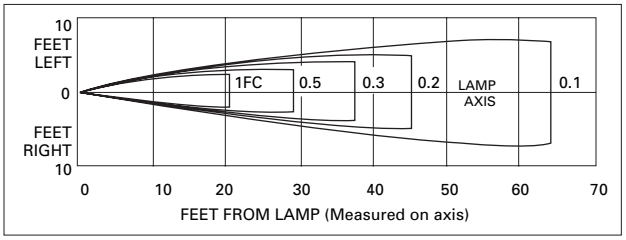
PHOTOMETRICS

Horizontal Distribution



Lamp No. 29-84 or No. 29-86
Initial Lumens – 29-84 @ 132
29-86 @ 138

Vertical Distribution



Lamp No. 29-84 or No. 29-86

TECHNICAL DATA

Heads

The lamp housing is constructed of flame-resistant and impact-resistant injection molded thermoplastic with matching finish. The three dimensional swivel assembly permits approximate aiming adjustment from 80° vertical and 358° rotation. The placement is secured with a lockable pivot mounted on a rotating base ring.

Lamps

Designed specifically for emergency lighting applications, the PAR 36 sealed beam type design insures optimum glare-free trapezoidal light distribution along with horizontal and vertical adjustment by rotating the lens within the housing.

Housing

The rugged 18-gauge die-formed steel housing is finished with white corrosion-resistant polyester powder coat paint. Cabinet has keyhole mounting slots and knockouts in top, rear and side for AC/DC wiring connections. Front cover has large viewport to allow visual inspection of electrolyte level and removable cover provides easy access to filler caps on the battery(s).

Line-Latched

Sure-Lites' line-latched electronic circuitry makes installation easy and economical. A labor efficient AC-activated load switch prevents the lamps from turning on during installation to a non-energized AC circuit. Line-latching eliminates the need for a contractor's return to a job site to connect the batteries when the building's main power is permanently turned on.

Solid-State Charger

Supplied with a 120/277 VAC, voltage regulated solid-state charger. Immediately upon restoration of AC current after a power failure, the charger provides a high charge rate. The charge circuit reacts to the condition of the battery and alters the rate of charge in order to maintain peak battery capacity and maximize battery life. Solid-state construction recharges the battery following a power failure in accordance with UL 924.

Overload and Short Circuit Protection

The solid-state overload monitoring device in the DC circuit disconnects the lamp load from the battery should excessive wattage demands be made and automatically resets when the overload or short circuit is removed. This overload current protective feature eliminates the need for fuses or circuit breakers for the DC load.

Brownout Circuit

The brownout circuit in Sure-Lites' units monitors the flow of AC current to the unit and activates the emergency lighting system when a predetermined reduction of AC power occurs. This dip in voltage will cause most ballasted fixtures to extinguish causing loss of normal lighting even though a total power failure has not occurred.

Solid-State Transfer

The unit incorporates a solid-state switching transistor which eliminates corroded and pitted contacts or mechanical failures associated with relays. The switching circuit is designed to detect a loss of AC voltage and automatically energizes the lamps. Upon restoration of the AC power, the emergency lamps will switch off and the charger will automatically recharge the battery.

Low-Voltage Disconnect

When the battery's terminal voltage falls below 80% of the rated voltage, the low-voltage circuitry disconnects the lighting load. The disconnect remains in effect until normal utility power is restored, preventing deep battery discharge.

Test Switch/Power Indicator Light

Conveniently located Test Switch allows for manual verification of proper operation of the transfer circuit and emergency lamps. The Power Indicator Light provides visual assurance that the AC power is on.

Serviceable Nickel Cadmium Battery

The wet cell pocket plate nickel cadmium battery remains the premier battery for emergency lighting applications. Designed with an extra large electrolyte reservoir, these batteries require maintenance every three to five years under normal ambient conditions. More frequent maintenance is required when operated at an elevated temperature. The sintered plate design should provide up to twenty-five years of service if properly maintained.

Warranty

All Sure-Lites' units are backed by a firm one-year warranty against defect in material and workmanship (excluding lamps). Serviceable, long-life, nickel cadmium batteries carry a fifteen-year pro-rata warranty.